IV. AMENDMENTS TO THE CLAIMS

1. – 13. (Canceled)

14. (New) A compressor used in a refrigerating cycle wherein:

in an area where a bottom surface and an inner circumferential surface of a housing connect with each other, said bottom surface forms an R-shaped portion and said inner circumferential surface forms a sloping portion or an R-shaped portion with said sloping portion of said inner circumferential surface achieving a substantially circular conic contour connecting the largest diameter portion of said R-shaped portion at said bottom surface and said inner circumferential surface.

15. (New) A compressor used in a refrigerating cycle, wherein:

in an area where a bottom surface and an inner circumferential surface of a housing connect with each other, said bottom surface forms an R-shaped portion and said inner circumferential surface forms a sloping portion or an R-shaped portion with the largest diameter of said R-shaped portion at said bottom surface equal to or larger than the internal diameter of said inner circumferential surface of said housing;

wherein said R-shaped portion at said bottom surface measures in a 2 to 10mm range.

16. (New) A compressor according to claim 14, wherein:

at least one of components constituting a housing and internal mechanisms is formed by using a tough material achieving a tensile strength greater than 800 N/mm^2 at normal temperature.

17. (New) A compressor according to claim 15, wherein:

at least one of components constituting a housing and internal mechanisms is formed by using a tough material achieving a tensile strength greater than 800 N/mm^2 at normal temperature.

18. (New) A compressor used in a refrigerating cycle, wherein:

in an area where a bottom surface and an inner circumferential surface of a housing connect with each other, said bottom surface forms an R-shaped portion and said inner circumferential surface forms a sloping portion or an R-shaped portion with the largest diameter of said R-shaped portion at said bottom surface equal to or larger than the internal diameter of said inner circumferential surface of said housing;

wherein the tensile strength of said tough material at maximum operating temperature is equal to or greater than 80% of the tensile strength at normal temperature.

19. (New) A compressor according to claim 16, wherein:
said tough material is cast iron.

20. (New) A compressor according to claim 17, wherein:
said tough material is cast iron.

21. (New) A compressor according to claim 18, wherein:
said tough material is cast iron.

22. (New) A compressor according to claim 19, wherein:
said cast iron has undergone an austempering treatment and has a bainitic structure.

23. (New) A compressor according to claim 20, wherein:
said cast iron has undergone an austempering treatment and has a bainitic structure.

24. (New) A compressor according to claim 21, wherein:
said cast iron has undergone an austempering treatment and has a bainitic structure.

25. (New) A compressor according to claim 16, wherein:
said tough material is a titanium alloy.

26. (New) A compressor according to claim 17, wherein:
said tough material is a titanium alloy.

27. (New) A compressor according to claim 18 , wherein:
said tough material is a titanium alloy.

28. (New) A compressor according to claim 25, wherein:
said titanium alloy has undergone a solution heat treatment and an aging treatment.

29. (New) A compressor according to claim 26, wherein:
said titanium alloy has undergone a solution heat treatment and an aging treatment.

30. (New) A compressor according to claim 27, wherein:
said titanium alloy has undergone a solution heat treatment and an aging treatment.

31. (New) A compressor according to claim 16, wherein:
said tough material is manufactured through casting.

32. (New) A compressor according to claim 16, wherein:
said tough material is manufactured through a powder metallurgical method.

33. (New) A compressor used in a refrigerating cycle, wherein:
in an area where a bottom surface and an inner circumferential surface of a housing connect with each other, said bottom surface forms an R-shaped portion and said inner circumferential surface forms a sloping portion or an R-shaped portion with the largest diameter of said R-shaped portion at said bottom surface equal to or larger than the internal diameter of said inner circumferential surface of said housing;
wherein carbon dioxide is used as a coolant.